Notice of Allowability	Application No.	Applicant(s)	
	10/529,491	TAKAHASHI ET AL.	
	Examiner	Art Unit	
	Anh T.N. Vo	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-35 ~~1-36~~. AV
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

 * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

 Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date See Continuation Sheet
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 04/05/07; 05/04/06 and 08/04/05.

REASONS FOR ALLOWANCE

The following is an Examiner's Statement of Reasons for Allowance:

Claims 1-5, 33/1 and 33/2 are allowed because the prior art references of record fail to teach a liquid detecting device for a liquid container comprising or suggest a liquid-detecting device comprising a first electrode that is formed on a side of a second face of a base, the first electrode having a main portion formed in a size larger than a bottom of a concavity so as to cover an almost overall area corresponding to the bottom of the concavity, the main portion including a notch formed so as to extend inward over a position corresponding to a periphery of the bottom of a concavity in the combination as claimed.

Claims 6-12, 33/6, 33/7 and 33/9 are allowed because the prior art references of record fail to teach or suggest a liquid detecting device for a liquid container comprising a first electrode that is formed in a size larger than a bottom of a concavity on a side of a second face of a base so as to cover an overall area corresponding to the bottom of the concavity in the combination as claimed.

Claims 13-18, 33/13 and 33/14 are allowed because the prior art references of record fail to teach or a liquid detecting device for a liquid container comprising a first electrode that is formed in a size larger than a bottom of a concavity on a side of a second face of a base so as to cover an overall area corresponding to the bottom of a concavity and a piezoelectric layer having a main portion that is formed in a size larger than the bottom of a concavity, the main portion of a piezoelectric layer being laminated on the first electrode so as to cover the overall area corresponding to a bottom of a concavity in the combination as claimed.

Claims 19-21, 33/19 and 33/20 are allowed because the prior art references of record fail to teach or suggest a liquid detecting device for a liquid container comprising a piezoelectric layer having a main portion that is formed in a size smaller than said main portion of a first electrode, the

main portion of the piezoelectric layer being laminated on the main portion of a first electrode in the combination as claimed.

Claims 22-26, 33/22 and 33/23 are allowed because the prior art references of record fail to teach or suggest a liquid detecting device for a liquid container comprising a first electrode that is formed in a size larger than a bottom of a concavity on a side of a second face of a base so as to cover an overall area corresponding to the bottom of a concavity and a piezoelectric layer having a main portion that is formed in a size larger than a bottom of a concavity, the main portion of the piezoelectric layer being laminated on the first electrode so as to cover the overall area corresponding to a bottom of the concavity in the combination as claimed.

Claims 27-35, 33/27 and 33/28 are allowed because the prior art references of record fail to teach or suggest a liquid detecting device for a liquid container comprising a first electrode that is formed on a side of a second face of a base, the first electrode having a main portion and an extension part, the main portion being formed in a size smaller than a bottom of a concavity and arranged within an area corresponding to the bottom of the concavity, the extension part extending from the main part of the first electrode up to an outside of the area corresponding to the bottom of the concavity in the combination as claimed.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These prior art references (US Pat. 4,644,789; US Pat. 5,583,544; US Pat. 6,336,647; US Pat. 6,470,744; US Pat. 6,675,646) cited in the PTO 892 form show a liquid detector which is deemed to be relevant to the present invention. These references should be reviewed.

CONCLUSION

Any comments considered necessarily by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Monday to Friday from 9:00 A.M.to 5:30 P.M.. The fax number of this Group 2800 is (571) 273-8300.

ANH T.N. VO
PRIMARY EXAMINER
April 29, 2007